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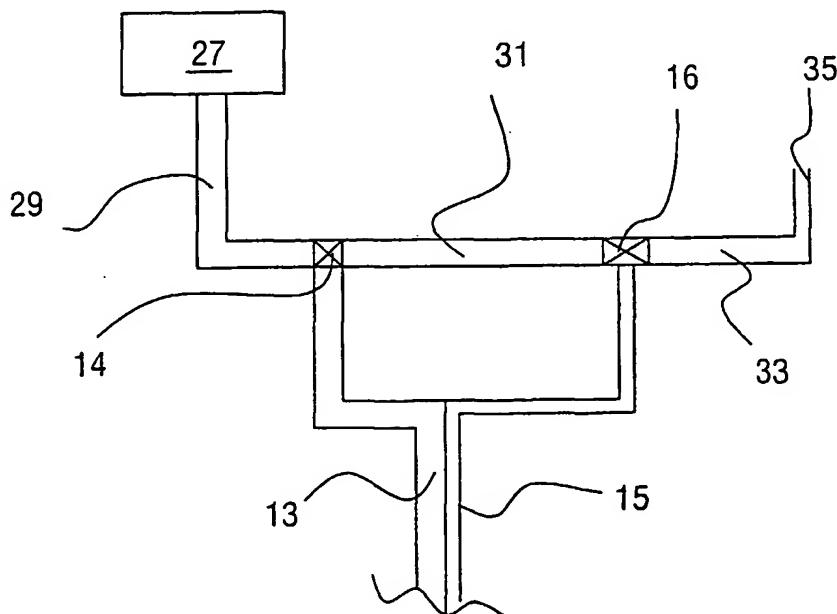
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(54) Title: STEAM AUTOMATIC DISPENSING DEVICE FOR PREPARING HOT AND/OR FROTHED DRINKS



(57) Abstract: A steam automatic dispensing device for preparing hot and/or frothed drinks, comprising: a first duct (13) for introducing steam inside said drink; a second duct (15) for introducing air inside said drink; an electronic control unit (51) for controlling the introduction of steam and/or air through said first and second duct, said control unit being programmable to carry out a predetermined control cycle depending on the desired drink to be obtained and on the drink temperature.

WO 2004/089173 A3

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A47J31/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 294 263 A (RANCILIO MACCHINE CAFFE) 26 March 2003 (2003-03-26)	1,2,7,8, 15
Y	paragraphs '0020! - '0027!; claims 1,15,16; figures 1-5 -----	11
X	US 6 099 878 A (ARKSEY MATTHEW L) 8 August 2000 (2000-08-08) column 2, line 46 - column 6, line 37; figure 1 -----	1-3,9,10
Y	FR 2 824 249 A (MAPA GMBH GUMMI PLASTIKWERKE) 8 November 2002 (2002-11-08) claim 1; figure 1 -----	11

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Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 1294263	A	26-03-2003	IT AU EP US CN WO	T020000616 A1 8576401 A 1294263 A1 2004107843 A1 1437455 T 0197668 A1		24-12-2001 02-01-2002 26-03-2003 10-06-2004 20-08-2003 27-12-2001
US 6099878	A	08-08-2000	US CA DE EP JP	6019032 A 2287802 A1 69909704 D1 0997093 A1 2000157231 A		01-02-2000 30-04-2000 28-08-2003 03-05-2000 13-06-2000
FR 2824249	A	08-11-2002	DE FR	20107565 U1 2824249 A3		23-08-2001 08-11-2002